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EXAMINER
VAN HANDEL, MICHAEL P

ART UNIT	PAPER NUMBER
2623	

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/994,583	CLEARY ET AL.
Office Action Summary	Examiner	Art Unit	
	Michael Van Handel	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This action is responsive to an Amendment filed 6/05/2006. Claims **1-28** are pending.

Claim **1** is amended.

Response to Arguments

1.   Applicant's arguments regarding the priority date of Berberet et al., filed 6/05/2006, have

been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, new grounds of rejection have been made.

2.   Applicant's arguments filed 6/05/2006 with respect to the priority date of Ellis et al. have

been fully considered, but they are not persuasive.

Regarding the priority date of Ellis et al., the examiner directs the applicant's attention to 35

U.S.C. 120, which states "An application for patent for an invention disclosed in the manner

provided by the first paragraph of section 112 of this title in an application previously filed in the

United States, or as provided by section 363 of this title, which is filed by an inventor or

inventors named in the previously filed application shall have the same effect, as to such

invention, as though filed on the date of the prior application, if filed before the patenting or

abandonment of or termination of proceedings on the first application or on an application

similarly entitled to the benefit of the filing date of the first application and if it contains or is

amended to contain a specific reference to the earlier filed application.

3.   Applicant's arguments filed 6/05/2006 with respect to claims **1-28** have been considered,

but are moot in view of the new ground(s) of rejection.

Claim Objections

1.   Claims **1, 14, 21, 26** are objected to because of the following informalities:

Referring to claim **1**, the examiner notes that the phrase "said stored, time shifted,

compressed audiovisual data" lacks antecedent basis. The claim previously refers to audiovisual

data and to a user time shifting request, but fails to mention stored, time shifted, compressed

audiovisual data.

Referring to claim **14**, the examiner notes that the phrase "said requesting subscribers"

lacks antecedent basis.

Further referring to claim **14**, the examiner notes that the phrase "said first and second

modes of operation" lacks antecedent basis. Claim 13 refers to an alternate mode of operation,

but does not make reference to a second mode of operation. The examiner interprets the second

mode of operation as referring to the alternate mode of operation described in claim 13 in the

Office Action below.

Referring to claim **21**, the examiner notes that the phrase "said EDP" lacks antecedent

basis. Claim 17 makes reference to EPD files, but fails to mention EDP files. The examiner

interprets the EDP as being EPD files in the Office Action below.

Further referring to claim **21**, the examiner notes that phrase "streaming of the Play, FF

and RW tracks" lacks antecedent basis. Claim 17 refers to generating fast-forward tracks and

rewind tracks, but does not mention FF or RW tracks. The examiner interprets the FF and RW

tracks as referring to the fast-forward tracks and rewind tracks of claim 17 in the Office Action

below.

Referring to claim **26**, the examiner notes that the phrase "said second mode of

operation" lacks antecedent basis. Claim 12 refers to a first mode of operation, but fails to

mention a second mode of operation. The examiner interprets the second mode of operation as

referring to the alternate mode of operation described in claim 13 in the Office Action below.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims **1-4, 7-17, 25-28** are rejected under 35 U.S.C. 102(e) as being anticipated by Ellis

et al.

Referring to claim **1**, Ellis et al. discloses a method, comprising:

-       receiving audiovisual data from a desired transmission channel (the recorder 125 is a

        process running on processing circuitry 11 of remote media server 24 and may direct

        the processing circuitry's one or more tuners to particular channels at particular

        times)(p. 6, paragraph 88);

- if said audiovisual data is not compressed according to a predetermined format, compressing said audiovisual data according to said predetermined format (p. 6, 7, paragraph 89);

- storing, in a mass storage device and for a predefined period of time, compressed audiovisual data received from said desired transmission channel (p. 6, paragraph 83); and

- in response to a user time shifting request, providing to said user stored, time shifted, compressed audiovisual data beginning with a portion of said stored, time shifted, compressed audiovisual data having associated with it a first temporal parameter (p. 15, paragraphs 163-166 & Fig. 22).

Referring to claim **2**, Ellis et al. discloses a method in a system adapted to receive broadcast content from each of a plurality of content sources and forward said received broadcast content to a transport network for distribution to subscribers, the method comprising:

- in response to a subscriber request for desired broadcast content, storing said desired broadcast content in a server (p. 8, paragraph 84);

- forwarding said desired broadcast content to said transport network for distribution to said requesting subscriber (p. 2, paragraph 13 & p. 7, paragraph 91); and

- in response to a subscriber request for temporally shifted content associated with said desired broadcast content, forwarding said stored broadcast content to said transport network for distribution to said requesting subscriber (p. 15, paragraphs 163-166 & Fig. 22).

Referring to claim **3**, Ellis et al. discloses the method of claim 2, further comprising

forwarding to said transport network only the received broadcast content presently requested by

any subscriber (p. 7, paragraph 91).

Referring to claim **4**, Ellis et al. discloses the method of claim 2, further comprising

storing, in said server, broadcast content presently requested by a threshold number of

subscribers (p. 6, paragraphs 85, 86).

Referring to claim **7**, Ellis et al. discloses the method of claim 2, wherein said storing of

said desired broadcast content comprises storing a version of the desired broadcast content to

generate a play track (p. 5, paragraph 74 & p. 7, paragraph 91).

Referring to claim **8**, Ellis et al. discloses the method of claim 2, further comprising,

storing selected broadcast content during a predetermined time interval of a broadcast schedule

(p. 5, paragraph 76).

Referring to claim **9**, Ellis et al. discloses the method of claim 2, wherein said subscriber

request for temporally shifted content is initiated by receiving a subscriber title selection from a

time shift interactive programming guide screen (p. 15, paragraphs 162, 163 & Fig. 22).

Referring to claim **10**, Ellis et al. discloses the method of claim 2, wherein said subscriber

request for temporally shifted content is initiated by receiving a subscriber title selection from a

time shift navigation screen (p. 15, paragraphs 162, 163 & Fig. 22).

Referring to claim **11**, Ellis et al. discloses the method of claim 2, wherein said subscriber

request for temporally shifted content is initiated by receiving a pause or rewind subscriber

selection while broadcasting of said desired content (p. 17, 18, paragraph 185).

Referring to claims **12** and **28**, Ellis et al. discloses a method/apparatus for providing

video information in an interactive information distribution system to a plurality of subscribers,

comprising:

- receiving a plurality of scheduled broadcast programs in real-time (p. 5, paragraph 76

  & p. 6, paragraph 88);

- selecting a portion of said broadcast programs (p. 6, paragraph 85-88);

- processing said selected broadcast programs into temporally adjusted content, such

  that the temporally adjusted content is associated with said selected broadcast

  programs (p. 15, paragraph 165);

- storing said temporally adjusted content (p. 15, paragraph 165; p. 17, 18, paragraph

  185; & p. 19, paragraph 200);

- broadcasting said plurality of scheduled broadcast programs to said plurality of

  subscribers (p. 4, paragraph 64 & p. 6, paragraphs 85, 86); and

- in a first mode of operation, streaming, on-demand, said temporally adjusted content

  to those subscribers viewing said selected broadcast programs currently being

  broadcast, such that said subscribers may interactively activate such temporally

  adjusted content contemporaneously with said currently broadcast programs (p. 15,

  paragraphs 165, 166 & p. 17, 18, paragraph 185).

Referring to claim **13**, Ellis et al. discloses the method of claim 12, wherein in an

alternate mode of operation, streaming, on-demand, said temporally adjusted content to those

subscribers viewing said selected broadcast programs previously broadcast, such that said

subscribers may interactively activate such temporally adjusted content during viewership of said previously broadcast programs (p. 15, paragraphs 163, 164).

Referring to claim **14**, Ellis et al. discloses the method of claim 13, wherein said requesting subscribers may interactively switch between said first and second modes of operation (the examiner notes that the remote media server 24 can perform real-time caching of a program, allowing a user to continue watching later. The user can then catch up to the aired program by fast-forwarding)(p. 15, paragraphs 165, 166).

Referring to claim **15**, Ellis et al. discloses the method of claim 12, wherein said selecting step comprises:

- monitoring subscriber viewership and selecting those broadcast programs having a viewership exceeding a predetermined metric (p. 6, paragraphs 85, 86 & p. 13, paragraph 148).

Referring to claim **16**, Ellis et al. discloses the method of claim 12, wherein said selecting step further comprises:

- generating title plans for identifying said broadcast programs to be temporally adjusted (the examiner notes that requests for VCR-like control are sent to the media server and specify which program the user wishes to control)(p. 15, paragraph 163); and

- defining a temporal availability window for each program (the examiner notes that the remote media server 24 records the program from the position at which the user began recording up to the position of the aired program (p. 15, paragraph 165, 166).

Referring to claim **25**, Ellis et al. discloses the method of claim 12, wherein said first

mode of operation further comprises providing an interactive program guide (IPG) to said

subscribers having screens presenting said broadcast programs having temporally adjusted

content for viewing and selection (p. 7, paragraphs 90, 91; p. 13, paragraphs 145-148; & Fig.

18d).

Referring to claim **26**, Ellis et al. discloses the method of claim 13, wherein said alternate

mode of operation further comprises providing a navigator list to said subscribers having screens

presenting said selected broadcast programs having temporally adjusted content for viewing and

selection (p. 7, paragraphs 90, 91; p. 13, paragraphs 145-148; & Fig. 18d).

Referring to claim **27**, Ellis et al. discloses the method of claim 12, wherein said first

mode of operation comprises receiving a temporal control message from a subscriber selected

from the group of temporal control messages consisting of pause, rewind, and fast-forward (p. 9,

paragraph 111 & p. 15, paragraphs 163, 164).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims **5, 6, 17-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et

al. in view of Moeller et al.

Referring to claims **5** and **6**, Ellis et al. discloses the method of claim 2. Ellis et al. further discloses allowing a user to pause, stop, rewind, fast-forward, or play a program at a remote media server (p. 15, paragraph 162). Ellis et al. does not specifically disclose that the step of storing comprises storing a temporally sub-sampled version of the desired broadcast content to generate a fast-forward track. Moeller et al. discloses a system that is capable of transferring or playing a normal play stream at any of various indicated positions or locations (col. 6, l. 45-49). The media server stores fast forward and fast reverse streams in association with normal play streams (col. 4, l. 61-65). The fast forward and fast reverse streams have different presentation rates than the normal play stream and are generated from the normal play stream (col. 6, l. 51-59). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the step of storing in Ellis et al. to include storing fast forward and fast reverse streams in association with a normal play stream, such as that taught by Moeller et al. in order to decrease latency time at a video server.

Referring to claim **17**, Ellis et al. discloses the method of claim 16. Ellis et al. does not disclose that the processing step comprises generating real-time encoded play tracks, fast-forward tracks, rewind tracks, and entry point data (EPD) files associated with each track, said fast-forward and rewind tracks forming said temporally adjusted content. Moeller et al. discloses generating fast forward and fast reverse video streams from a normal play stream (col. 6, l. 55-59) and embedding indexing information within the streams to provide for indexing between the streams (col. 9, l. 10-14 & col. 11, l. 39-41). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the processing step of Ellis et al. to include generating fast forward and fast reverse video streams from a normal play stream and

embedding indexing information within the streams to provide for indexing between the streams,

such as that taught by Moeller et al. in order to efficiently index to different positions in a video

stream in a video delivery system (col. 4, l. 20-23).

Referring to claim **18**, the combination of Ellis et al. and Moeller et al. teaches the

method of claim 17. Ellis et al. further discloses encoding the broadcast programs identified in

the title plan (p. 6, 7, paragraph 89) and buffering said encoded broadcast programs (p. 6, 7,

paragraph 89). Ellis et al. does not disclose that the processing step comprises encoding said

broadcast programs to form said temporally adjusted programs. Moeller et al. discloses

generating compressed fast forward and fast reverse video streams from a normal play stream

(col. 6, l. 55-59). It would have been obvious to one of ordinary skill in the art at the time that

the invention was made to modify the processing step of Ellis et al. to include generating

compressed fast forward and fast reverse video streams from a normal play stream, such as that

taught by Moeller et al. in order to decrease latency time at a video server.

Referring to claim **19**, the combination of Ellis et al. and Moeller et al. teaches the

method of claim 18. Ellis et al. does not disclose that the processing step further comprises:

- receiving packetized transport streams from at least one encoder; and

- inserting title identification codes (TICs) to each packet to enable said transport

    streams to be identified as said real-time encoded play tracks, fast-forward tracks, and

    rewind tracks.

Moeller et al. discloses generating compressed fast forward and fast reverse video

streams from a normal play stream (col. 6, l. 56-59). Moeller et al. further discloses that the

encoded stream includes sequence headers that include presentation timestamps and information

describing the frame rate and picture size (col. 9, l. 57-62). Moeller et al. further discloses

embedding indexing information within the normal play stream and associated trick play streams

to provide for indexing between the streams (col. 9, l. 10-14). It would have been obvious to one

of ordinary skill in the art at the time that the invention was made to modify the processing step

of Ellis et al. to include embedding timestamps, frame rate information, and indexing

information within play streams and trick play streams, such as that taught by Moeller et al. in

order to decrease latency time at a video server.

Referring to claims **20** and **21**, the combination of Ellis et al. and Moeller et al. teaches

the method of claim 19. Ellis et al. does not disclose generating EPD files as fast-forward and

rewind tracks are being created. Moeller et al. discloses generating and embedding index

information within normal play streams and associated trick play streams to provide for indexing

between the streams (col. 9, l. 10-14). It would have been obvious to one of ordinary skill in the

art at the time that the invention was made to modify Ellis et al. to include generating and

embedding index information within normal play streams and associated trick play streams, such

as that taught by Moeller et al. in order to decrease latency time at a video server.

5.   Claims **22-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al.

in view of Moeller et al. and further in view of Youden et al.

Referring to claim **22**, the combination of Ellis et al. and Moeller et al. teaches the

method of claim 19, wherein the storing step includes receiving the buffered encoded broadcast

programs (p. 6, 7, paragraphs 89, 90) and storing the real-time play tracks in a plurality of

extents (p. 6, paragraphs 82, 83). Neither Ellis et al. nor Moeller et al. disclose that the storing

step comprises storing said fast-forward tracks in extents in front to back order and storing said

rewind tracks in extents in back to front order. Youden et al. discloses storing selected video

data for a FF version in the same order as the original video data is stored and storing the

selected video data for the FR version in reverse order to the original version of the video data

(col. 4, l. 3-7). It would have been obvious to one of ordinary skill in the art at the time that the

invention was made to modify the storing step in the combination of Ellis et al. and Moeller et al.

to include storing video data for a FF version in the same order as the original video data is

stored and storing the selected video data for the FR version in reverse order to the original

version of the video data, such as that taught by Youden et al. in order to decrease latency time at

a video server.

Referring to claim **23**, the combination of Ellis et al., Moeller et al., and Youden et al.

teaches the method of claim 22, where said storing step further comprises storing selected

broadcast programs from a particular channel for a fixed window of time (Ellis et al. p. 6,

paragraph 87).

Referring to claim **24**, the combination of Ellis et al., Moeller et al., and Youden et al.

teaches the method of claim 22, where said storing step further comprises storing selected

broadcast programs from a plurality of channels (Ellis et al. p. 6, paragraph 88).

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Gelman et al. discloses an architecture, which stores information programs from single or multiple vendors, forwards segments of requested programs in high speed bursts, and buffers the segments for interactive play-out of the requested programs to subscribers in real time.

Muller discloses a device that transmits interframe-coded video data. In response to a request for fast forward or fast backward mode, the video data of the entry point are transmitted intraframe-coded, and all subsequent video pictures are transmitted interframe-coded.

Li et al. discloses an interactive video-on-demand system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571.272.5968. The examiner can normally be reached on Monday-Friday, 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 571.272.7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Note to Applicant

Art Units 2611, 2614 and 2617 have changed to 2623. Please make all future
correspondence indicate the new designation 2623.

Michael Van Handel
Examiner
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MVH

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